

GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

## BRIDGE INSPECTION REPORT B10132021-2

8 m

 $0 \, \mathbf{m}$ 

1 m

0.5 m

**Overall Length:** 

Sidewalk Width:

N.W.L.:

Spans:

Clearance to R.D. or

Max Depth of N.W.L.:

Date: 10/6/2021 Inspected By: Mike Button Category: Office - Bridge Office

**BRIDGE INFORMATION** 

Site: 2-164 - GEORGE'S BROOK BRIDGE #1

Route: 230A

Year Built:1962Est: YesOverall Width:8 mYear Last Rehab.:Est: NoRoadway Width:7.4 m

Region: CENTRAL EAST

Jurisdiction: Provincial

Type of Structure: 03 - Reinforced Concrete Beam/Slab

Purpose of Structure: 04 - Over Non-Navigable Waters

06 - None Type of Handrail: Span No.: Length Span No.: Length 02 - Asphalt Roadway Surface: 1 4.5 4 01 - Good 2 0 5 0 Alignment Vertical: 3 0 6 0 01 - Good Alignment Horizontal:

Restrictions: No

## **BRIDGE PHOTOS**





## SUBSTRUCTURE

**Condition:** P3 - Poor **Bearings:** I - Inapplicable

Bearing Seat: I - Inapplicable

Comments: - West wingwalls have medium alligator cracking with efflorescence. - Southeast wingwall's top half is totally

disintegrated and roadway gravels are washing into the brook below, P1. - Northeast wingwall top quarter also total disintegrated. Remainder portion is heavily cracked with efflorescence, P1. Wingwall has an overlay joint with the north abutment (likely from construction) that is heavily eroded and spalling. - South abutment in fair condition, with the exception of the southeast corner which has mild cracking with medium efflorescence. - North abutment in fair condition, mild concrete erosion on the upstream extension footing construction joint on the northwest side. - Construction joint between the upstream extension and old structure opened up and

deteriorating with spalls and efflorescent leakage on both abutment faces, P3.

## **SUPERSTRUCTURE**

Condition: P1 - Poor Expansion Joints: I - Inapplicable

- Both fascias have med-wide horizontal cracks throughout with light efflorescence. East fascia/curb inside the

Comments:	structure has medium-severe efflorescent leakage between it and deck, P3 Construction joint between the upstream extension and old structure on the bottom of deck is heavily disintegrated forming a large spall exposing severely corroded reinforcement, P1 Old exterior curb beam, now under the structure, totally disintegrated, holes through section with near all reinforcement exposed with extreme corrosion, P3 Bottom of deck, unless noted above, in fair condition.		
DECK			
Condition:	F1 - Fair	Curbs:	I - Inapplicable
Hand Rail:	P1 - Poor	Roadway Condition:	F2 - Fair
Approach Rail:	P3 - Poor		
Comments:	- Asphalt in fair condition Guiderail post bolts no longer in concrete. Guiderail is now free to flex over structure span, P1 No end blocks, curbs or hazard markers Approach/exit rail has minor dents and scrapes with some post tipping away from the roadway, P3.		
HYDROLOGY			
Water Velocity:	0.3 m/s	Ice Problem:	N - No Problem
Water Depth:	0.3 <b>m</b>	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Southeast corner has heavy erosion from	n roadway to brook. Wingwa	all disintegrated.
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2024	Replacement Year:	2040
Antic. Rehab. Cost:	\$75,000	Replacement Cost:	\$500,000
Recommendations:	- Replace guiderail, east wingwalls, and repair/re-seal upstream extension construction joint. Consider replacing structure with a culvert.		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	- P1 = upstream construction joint bottom of deck, east wingwalls, and guiderail. P3 = upstream construction joint abutment faces and approach rail. F1 = remainder Properties on south side of structure Hazards, traffic Rubber boots for inspection.		
LEGEND: Condition Definitions: 1 - *Good - [discontinued code]. 2 - *Fair - [discontinued code]. 3 - *Poor - [discontinued code]. 4 - *Unsafe - [discontinued code]. G - Good. PHOTO GUIDELINES: Inspection Photos:  Please provide photos using guideling a provide pho	F2 - Fair. C - Unsafe (Closed to F1 - Fair. U - Uninspectable. P3 - Poor. I - Inapplicable. P1 - Poor. P - Poor.	Public). N - No Pr P - Possi K - Know	Definitions: Oblem. Maint Maintenance. ble Problem. Problem. Office - Bridge Office.  Applicable.

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2021.

**INSPECTION PHOTOS**